

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023689**Date Inspected:** 14-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Sun Tian Liang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 009126

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 13CW. The weld designations reviewed are as follows:

1. SEG3015B-004
2. SEG3015D-004
3. SEG3015K-004
4. SEG3015F-006
5. SEG3015H-006
6. SA3232B-001-018, 015, 012, 011, 009, 005, 006, 003, 002
7. SA3232A-001-035, 034, 032, 031, 008, 005, 004

OBG Trail Assembly

This QA Inspector observed the following work in progress:

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Flux Core Arc Welding (FCAW) welding of weld joint SA3133-001-001 and 003 located on corner assembly connected SA3133 at panel point 123 to 123.5 FL2 side of OBG Segment 13CW. ZPMC Welder is identified as 045240. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

FCAW welding of weld joint SA3134-002-001 and 003 located on corner assembly connected SA3133 at panel point 123 to 123.5 FL2 side of OBG Segment 13CW. ZPMC Welder is identified as 066695. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

FCAW welding of weld joint SEG3015H-234, 238 and 242 located on vertical plate RS stiffeners at panel point 123 of OBG Segment 13CW. ZPMC Welder is identified as 066687. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

FCAW welding of weld joint SEG3015F-264, 268, 272 and 276 located on vertical plate RS stiffeners at panel point 123.5 of OBG Segment 13CW. ZPMC Welder is identified as 045240. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

SMAW welding of weld joint SEG3015D-267 located on vertical plate RS stiffeners at panel point 124 of OBG Segment 13CW. ZPMC Welder is identified as 066479. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3020Q-090 located on X-plate (X4989) to floor beam at of OBG Segment 14W. ZPMC Welder is identified as 037932. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

SMAW welding of weld joint SA3447-001-024 located on SA-stiffener of OBG Segment 14W. ZPMC Welder is identified as 067764. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

FCAW welding of weld joint SEG3020T-162 located on Edge Beam at panel point 125.5 of OBG Segment 14W. ZPMC Welder is identified as 066421. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-FCAW-2G-(2F)-FCM-ESAB-Repair-1, which is used as per Welding Repair Report (WRR) B-WRR-20917.

general compliance with the applicable contract documents.

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### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Vibin

Quality Assurance Inspector

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**Reviewed By:** Patel,Hiranch

QA Reviewer